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10/577,290	04/27/2006	Thierry Prigent	86577WRZ	2852

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EXAMINER	
PARKER, AUTUMN H	
ART UNIT	PAPER NUMBER
2862	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,290	PRIGENT, THIERRY	
	Examiner	Art Unit	
	AUTUMN PARKER	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05 Nov 2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1, 2 and 4-13 are pending in the instant application. Claim 3 has been cancelled by the Applicant.

2. Claims 1 and 13 have been amended to include additional limitations.

Response to Arguments

3. Applicant's arguments filed 05 November 2008 have been fully considered but they are not persuasive.

4. Applicant argues that Klees (U.S. Patent No. 6,407,767) fails to teach an encoding base with more than three rows. However, Klees states "The reference calibration patches produced by this system can be neutral, colored, or any combination thereof." (col. 5, lines 50-65), which indicates that the calibration patches are not merely a binary black or white, but also shades of gray as well (or colored). This is also supported in Figure 2 of Klees, element number 82.

5. Regarding Claim 13, Klees teaches the encoding characteristics as described in the response to arguments above. Applicant further argues that Reem (U.S. Patent No. 5,667,944) fails to teach both the encoding marks and the exposure ranges recited in amended Claim 13. However, Reem clearly teaches both the encoding marks (Fig. 2, [14]) and the sensitometry control (Fig. 1, [30]). Applicant finally argues that the sensitometry control taught by Reem fails to show a range ***distinct from*** the encoding

marks (emphasis added). However, according to Applicant's disclosure, the sensitometry control is designed to cover the same range as the encoding marks. This would indicate that the sensitometry control is mandated to be similar to or identical in range to the encoding marks, rather than distinct from the encoding marks (p. 3, lines 13-23; p. 4, lines 6-16; abstract).

6. Claims 4, 5, 7 and 10-12 depend directly or indirectly from Claim 1, and stand rejected for the reasons given above.

7. The 35 U.S.C. 112, 1st paragraph rejection of Claim 13 was necessitated by Applicant's amendment.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for encoding marks and sensitometry control with exposure ranges, does not reasonably provide enablement for those ranges being distinct from the encoding marks. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification explicitly states that the sensitometry control exposure ranges should cover the same range of exposure energies as the encoding marks (p. 3, lines 13-23; p. 4, lines 6-16; abstract).

The specification therefore discloses that the sensitometry control is mandated to be similar to or identical in range to the encoding marks, rather than distinct from the encoding marks.

10. For the purposes of examination, the Examiner has interpreted Claim 13 as reciting "at least one sensitometry control that can be used to convert the densities of the marks into exposure energy values."

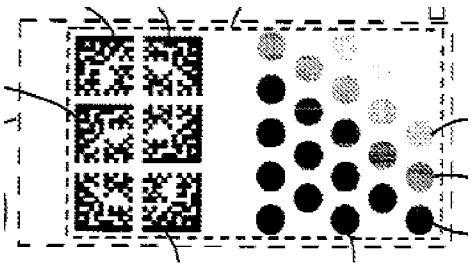
Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2 and 8, 9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Klees et al., U.S. Patent No. 6,407,767 (hereafter referred to as 'Klees').

13. Regarding Claim 1, Klees discloses a method of recording data on a photographic support (Fig. 1), comprising the formation on the support of a plurality of encoding marks (Fig. 2, [74]), linked to a plurality of data items to be recorded (col. 4, lines 58-62), each encoding mark being formed with an exposure energy that is a preset function of a value of the data to be recorded linked to the mark (col. 5, lines 3-10), and the formation, on the same support, of at least one sensitometry control (Fig. 2, [76]), the sensitometry control covering a



range of exposure energies used to form the marks (Fig. 2, [82]), wherein the data are encoded in an encoding base with rows N, more than 3, and wherein the preset function links a different preset energy exposure value to each of the possible values of a data encoded in the base with rows N (Fig. 2; col. 5, lines 60-65).

14. Regarding Claim 2, Klees discloses the photographic support is a film (col. 4, line 65) and wherein the exposure energy is light energy (col. 4, lines 1-18).

15. Regarding Claim 8, Klees discloses the encoding marks have an elongated barcode shape (Fig. 2, [74, 78]; col. 5, lines 7-8).

16. Regarding Claim 9, Klees discloses the encoding marks and the sensitometry control are formed using the same exposure source (col. 4, lines 8-11; col. 5, lines 3-10).

17. Regarding Claim 13, Klees discloses a photographic support (Fig. 2, [70]) comprising marks encoding digital data in a base with rows N more than 3 respectively (Fig. 2, [74]) with a number of density levels N more than 3, and at least one sensitometry control (Fig. 2, [76]) that can be used to convert the densities of the marks into exposure energy values.

18. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Reem et al., U.S. Patent No. 5,667,944 (hereafter referred to as 'Reem').

19. Regarding Claim 13, Reem discloses a photographic support (Fig. 1, [10]) comprising marks encoding

digital data in a base with rows N more than 3 respectively (Fig. 1, [14]) with a number

of density levels N more than 3 (Fig. 2, [14]), and at least one sensitometry control (Fig. 1, [30]) that can be used to convert the densities of the marks into exposure energy values.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

21. Claims 4, 5, 7 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klees in view of Reem.

22. Regarding Claim 4, Klees teaches the invention as claimed above. Klees does not specifically teach the encoding base is a base with rows 256, and wherein 256 preset exposure values are planned for forming the marks. Reem teaches that full image resolution normally includes 256 signals or exposure values (col. 9, lines 13-16). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have included 256 preset exposure values into the encoding base taught by Klees as a standard for normal film resolution as taught by Reem.

23. Regarding Claim 5, Klees teaches the exposure energy of each mark is a one-to-one function of a data value to be recorded (col. 15, lines 5-10).

24. Regarding Claim 7, Klees teaches the data are encoded in an encoding base with rows CxN, and wherein the preset one-to-one function links a unique combination

of a preset exposure energy value taken from among N and a color range taken from among C to each possible value of encoded data in the base with rows CxN (Fig. 2, [74]; col. 15, lines 5-10).

25. Regarding Claim 10, Klees teaches the invention as claimed above. Klees does not specifically teach the processing procedure after the initial exposure of the film. Reem teaches after development of the support, the establishment of at least one sensitometry relation from the sensitometry control, measurement of the optical density of the exposed encoding marks of the support, conversion of the optical density of each mark into at least one exposure energy value by using the sensitometry relation, and the establishment of a value of the data linked to the mark from the exposure energy and the preset function (col. 8, lines 10-44). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have used the processing steps taught by Reem in combination with the invention taught by Klees for the purpose of effectively using both the metadata encoding marks (barcode) and the sensitometry information (calibration data) in combination to produce an appropriately developed image.

26. Regarding Claim 11, Klees teaches the invention as claimed above. Klees does not specifically teach the processing procedure after the initial exposure of the film. Reem teaches the establishment of a plurality of sensitometry relations corresponding to a plurality of spectral exposure ranges, measurement of the optical densities of the encoding marks in these spectral ranges, conversion of the optical densities of each mark into several exposure energy values corresponding to the spectral ranges, and the

establishment of a value of the data linked to the mark from the exposure energies and the preset function (col. 8, lines 10-44). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have used the processing steps taught by Reem in combination with the invention taught by Klees for the purpose of effectively using both the metadata encoding marks (barcode) and the sensitometry information (calibration data) in combination to produce an appropriately developed image.

27. Regarding Claim 12, Klees teaches the invention as claimed above. Klees does not specifically teach the processing procedure after the initial exposure of the film. Reem teaches the establishment of a sensitometry relation with several dimensions corresponding to several color components, measurement of the optical density of the exposed marks of the support according to these color components, conversion of the optical density of each mark into exposure energy values taken according to these color components by using the sensitometry relation, and, the establishment of a value of the data linked to the mark from the exposure energy values and the preset function (col. 8, lines 10-44). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have used the processing steps taught by Reem in combination with the invention taught by Klees for the purpose of effectively using both the metadata encoding marks (barcode) and the sensitometry information (calibration data) in combination to produce an appropriately developed image.

28. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klees in view of Saito. Klees teaches the salient features of the claimed invention except for

recording the encoding marks using spectral energy in at least two different ranges. Saito teaches in figure 1 that it was known to utilize recording the encoding marks using spectral energy in at least two different ranges. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Saito for the purpose of increasing the amount of information capable of being stored/encoded.

Conclusion

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUTUMN PARKER whose telephone number is

(571)270-3916. The examiner can normally be reached on Mon-Thurs, 8:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP
30 Dec 2008

/Patrick J Assouad/
Supervisory Patent Examiner, Art Unit 2862